BEFORE THE FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC

In re Applications of	)	MM Docket No. 92-111
Deas Communications, Inc., et al.	)	File Nos. BPH-910208MB et al.
For A Construction Permit For A New FM Station on Channel 240A Healdsburg, California	)	

To: Hon. Edward J. Kuhlmann,
Administrative Law Judge

PETITION FOR LEAVE TO FILE CORRECTED AMENDMENT

Healdsburg Broadcasting, Inc. ("HBI"), by its attorney, hereby petitions for leave to amend its application to include the attached corrected Amendment No. 7 which contains the engineering information from HBI's June 19, 1992 Amendment, which cured the antenna height and contour overlap matters noted in the Hearing Designation Order ("HDO") DA 92-577 released May 20, 1992, and which includes the minor corrective information responsive to the June 30, 1992 Mass Media Bureau Opposition as reflected in the presiding judge's Memorandum Opinion and Order FCC 92M-782.

As HBI's concurrently filed Response to Order to Show Cause ("Show Cause Response") notes, HBI's June 19, 1992 Amendment, which was rejected, contained an error concerning the radiation pattern of HBI's directional antenna as pointed out by the Mass Media Bureau in its June 30, 1992 Opposition to HBI's Petition For Leave To Amend. See Order at para. 3.[1] Undersigned counsel

[1]To the extent necessary and so as not to reduplicate all of the material attached to the Show Cause Response, Attachments 1 through 7 thereto are incorporated by this reference herein.

received the Bureau's Opposition on July 3, 1992 and forwarded it to both of HBI's consulting engineers, Stephen C. Petersen P.E. and Hatfield & Dawson. As indicated below, they determined that the error noted by the Bureau was the result of a typographical error contained in information provided Mr. Petersen by Jampro Antennas, Inc. ("Jampro"). During the intervening time between July 3, 1992 and receipt of the Show Cause Order yesterday, by facsimile, both Mr. Petersen and Benjamin Dawson of Hatfield & Dawson spoke with Jampro and obtained the correct information that is included in the attached amendment.

As indicated in the Statement and accompanying engineering information of Benjamin Dawson, of the engineering firm Hatfield & Dawson, (Attachment 1 to HBI's Show Cause Response), the August 13, 1991 engineering Pattern Envelope information (Attachment 2, pages 2-3 thereto) provided Mr. Petersen by Jampro, contained typographical errors which conflicted with Jampro representations to Mr. Petersen in other information it provided him -- that the slope of the Jampro pattern "will comply with known FCC rules" so that "a protection null will not exceed 2 dB per 10 degrees azimuth." See Show Cause Response, Attachment 2 at p. 1, the August 7, 1991 Original Jampro Antenna Data.

Mr. Dawson's statement is confirmed by Mr. Petersen's July 10, 1992 Declaration (Attachment 3 thereto) and the Declaration of July 10, 1992 of Eric Dye, Jampro staff engineer (Attachment 4 thereto). As Mr. Dawson indicates in his engineering statement, and as Mr. Dye confirms in his declaration, although the antenna

pattern was intended by Jampro to be symmetrical around the 150 degree bearing, Jampro's typing error resulted in a relative field of 0.64 rather than 0.62 in the relative field value for 190 degrees, resulting in incorrect interpolated values for 185 and 175 degrees in the June 19, 1992 HBI amendment. See Show Cause Response, Dawson Statement (Attachment 1 thereto) at p. 1.

Mr. Dawson goes on to state that Jampro has provided him with the corrected data table and pattern plot which he included as Attachment 5 thereto to his statement and the Show Cause Response. In turn, Mr. Dawson and undersigned counsel provided Mr. Petersen the corrected Jampro data and Mr. Petersen has corrected the errors which the Jampro typographical error caused in the corrected amendment.

As Mr. Dawson further concludes, the changes in the corrected amendment should be characterized as "trivial" and are of no decisional significance in relation to the processing of the amendment or Commission procedures. See Show Cause Response, Attachment 1 at p. 2. Additionally, as Mr. Dawson notes, the Jampro corrections allow HBI to meet the sole objection of the Bureau as repeated in the Order. Id. Finally, Mr. Dawson notes that he, himself, did not find the esoteric radiation pattern errors despite the fact that HBI hired him to make sure that the June 19, 1992 Amendment met the specific antenna height and contour overlap concerns raised in the Hearing Designation Order DA 92-577 released May 20, 1992 ("HDO"), which in fact it did. See Show Cause Response, Attachment 1 at p. 1. See also Bureau

June 30, 1992 Opposition.

Good cause exists for acceptance of the attached corrective data under sections 73.3514 and 73.3522 of the Commission's rules. HBI has acted with diligence, within a twelve (12) day period after notice of the error as contained in the Bureau's Opposition.[2] The corrected amendment does not result from a voluntary act by HBI. Indeed, the amendment is two steps removed from the purview of HBI since it occurred as a result of a typographical error from the manufacturer of the proposed directional antenna upon which HBI's engineer reasonably relied and which as the Jampro/Dye declaration (Attachment 3 to the Show Cause Response) and associated material indicates, was represented to comply with Commission rules and, in fact, would have but for the Jampro typographical error.

HBI's amendment will clearly not require modification or enlargement of the issues and will not disrupt the orderly processes of the hearing, because the hearing schedule has been set with which HBI is and will comply. Likewise, the amendment neither claims to nor does it afford HBI any comparative advantage nor will it prejudice any other party to the proceeding, since the correction of the typographical error and associated engineering calculations is de minimis and has no impact on the other applications in this proceeding. Indeed, no applicant has a vested right in any other applicant's dismissal

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[2]As stated previously, the Bureau's Opposition is dated June 30, 1992 and was not received by undersigned counsel until July 3, 1992.

or disqualification. Croswaith v. FCC, 44 RR2d 107 (D.C. Cir. 1978); Washington's Christian Television Outreach, Inc. 99 FCC 2d 395, 56 RR2d 1539, 1546 (1984). Finally, acceptance of the corrected amendment preserves the Commission's choice among competing applicants. Ashbacker Radio Corp. v. FCC, 326 U.S. 327 (1945); Azalea Corp. 31 FCC 2d 561, 22 RR2d 909 (Rev. Bd. 1972).

Acceptance of the corrected Amendment, nunc pro tunc, is in accord with Commission precedent and within the authority of the presiding judge. Magdalene Gunden Partnership, 2 FCC Rcd 5513, 5515 paras. 7-8; 63 RR2d 1647 (Rev. Bd. 1987) recon. denied 3 FCC Rcd 488; rev. denied on other grounds, 3 FCC Rcd 7186 (1988) pet. for recon. denied, 5 FCC Rcd 2509 (1990) aff'd in part and reversed and remanded in part 69 RR2d 613, 615-616, sub nom Marin TV Services Partners, Ltd. v. FCC (D.C. Cir. 1991).

In Gunden, the Board held that good cause existed for the acceptance of an amendment after issuance of a designation order in a comparative hearing and after the specification of a city grade coverage issue against an applicant, North Bay, concluding that North Bay's actions to correct its major problem within seven weeks was prompt and duly diligent. 63 RR2d at paras. 8-9. Equally as important, the Board also agreed with the presiding judge that despite fact that North Bay's engineer did not follow either his own normal or good engineering practices concerning North Bay's original site (the cause of North Bay's problem), North Bay was entitled to and did rely upon their engineer's recommendation on a highly technical matter. Id. at paras. 6-9.

Thus, the Board concluded that it would be unfair to saddle an applicant with the failure of its professional engineer with regard to "an issue of a highly technical and esoteric error," which when corrected, provided the required city grade coverage. Ibid. The D.C. Circuit, in turn, affirmed both the Board and the Commission stating that the expert could not have foreseen the technical issues and the necessity to amend its application and that North Bay was entitled to rely on its expert. Marin TV Services Partners, Ltd. v. FCC, supra.

HBI's facts are much less egregious than North Bay's. Here, the technical error is much more esoteric, yet much less significant than city grade coverage, a sine qua non of both acceptance and grant of an application. Moreover, the error originates not with its expert consulting engineer but with typographical errors from the antenna manufacturer, itself. Not even HBI's additional expert engineers, Hatfield & Dawson could recognize the errors in HBI's June 19, 1992 Amendment which they reviewed prior to its filing (see Show Cause Response, Attachment 1 at p.1.), because they, like Stephen C. Petersen, were not aware of the existence of those typographical errors. Moreover, as in the case of Magdalene Gunden Partnership, the typographical errors, when corrected, permit the correct calculated values to be determined so that HBI would, as noted, have been in compliance with the requirements of Section 73.316 of the Commission's rules, but for an outside third party's

typographical errors. Magdalene Gunden Partnership, supra.[3]

Finally, it should be reiterated, as the Bureau notes in its June 30, 1992 Opposition, that the June 19, 1992 Amendment corrects the defects noted in the HDO, namely the antenna height and contour overlap deficiencies as set forth in Ordering Paragraph 20 therein. Neither the June 19, 1992 Amendment nor the corrected amendment run afoul of the Commission's "hard look" processing guidelines. See Report and Order Related To Processing of FM and TV Applications MM Docket No. 84-750, 50 FR 19936 (1985), 58 P&F 2d 776, recon. denied, 50 FR 43157 (1985) & Statement of New Policy Regarding Commercial FM Applications That Are Not Substantially Complete or Otherwise Defective ("Hard Look Order") 50 FR 19445, 58 P&F 2d 166 (1985). All of the elements of engineering data required for acceptability are correctly contained in the June 19, 1992 amendment, e.g. HAAT, actual antenna location, maximum ERP, geographic location of HBI's transmitter site and antenna type and manufacture (among other things). Hard Look Order, supra, at 58 P&F 2d 167-168.

Thus, for good cause shown, HBI requests that its corrected

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[3]See also March 17, 1988 letter from the Bureau to B. Jay Baraff (Show Cause Response Attachment 6 thereto) wherein the Bureau accepted, nunc pro tunc, an application because of discrepancy in site coordinates where the applicant and its engineers relied on coordinates from an actual land survey supplied by the City of Trinity which deviated from those portrayed in the U.S.G.S. map.

amendment be accepted nunc pro tunc.

Respectfully submitted,

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San Francisco, CA 94111
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Counsel to Healdsburg
Broadcasting, Inc.

July 15, 1992

Healdsburg Broadcasting, Inc. Application
Corrected Amendment No. 7
Application No. BPH-910211MB
FM Radio Station on Channel 240A
Healdsburg, CA

Healdsburg Broadcasting, Inc. hereby amends its application to reinclude the attached engineering information required by the Hearing Designation Order in MM Docket No. 92-111. This information contains corrections to an error which arose as a result of a typographical error in the information provided HBI's consulting engineer by the manufacturer of its proposed directional antenna, Jampro Antennas, Inc.

Julia Akana

Date: July 15, 1992 Julia Akana, Secretary

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

Healdsburg Broadcasting, Incorporated (amendment)

Call letters *(if issued)*	Is this application being filed in response to a window? ☐ Yes ☒ No If Yes, specify closing date: _____

Purpose of Application: *(check appropriate box(es))*

- ☒ Construct a new (main) facility
- ☐ Construct a new auxiliary facility
- ☐ Modify existing construction permit for main facility
- ☐ Modify existing construction permit for auxiliary facility
- ☐ Modify licensed main facility
- ☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- ☐ Antenna supporting-structure height
- ☐ Effective radiated power
- ☐ Antenna height above average terrain
- ☐ Frequency
- ☐ Antenna location
- ☐ Class
- ☐ Main Studio location
- ☐ Other *(Summarize briefly)*

File Number(s) BPH-910211MB

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
240	Healdsburg	Sonoma	CA

Class *(check only one box below)*

☒ A ☐ B1 ☐ B ☐ C3 ☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

Mt. Jackson: 10.2 Km bearing 13.0 deg. True to D90-228 Coordinates

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	38°	32'	24"	Longitude	122°	57'	39"

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both. _____

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

_____

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No. 5

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. 6

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 3.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 2000 sq. km. Population 90,301

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. NA

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

[X] Linearly interpolated 30-second database [ ] 7.5 minute topographic map

(Source: NOAA)

[ ] Other *(briefly summarize)*

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 5)

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
*			
0	271	14.1	25.1
45	397	17.1	30.2
90	438	17.2	30.4
135	444	10.6	19.3
180	343	11.3	20.1
225	388	16.9	29.9
270	345	16.0	28.2
315	83	7.8	13.8

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement *(See 47 C.F.R. Section 1.1301 et seq.)*

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No. NA

If No, explain briefly why not.

See Engineering Statement, Exhibit-1

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name *(Typed or Printed)*	Relationship to Applicant *(e.g., Consulting Engineer)*
Stephen C. Petersen	Consulting Engineer
Signature: Stephen C. Petersen	Address *(Include ZIP Code)*: 9629 Zayante Drive, Felton, CA 95018
Date: July 14, 1992	Telephone No. *(Include Area Code)*: (408) 335 - 3115

REGISTERED PROFESSIONAL ENGINEER STEPHEN C. PETERSEN No. 13[illegible] Exp 6/30/93 ELECTRICAL STATE OF CALIFORNIA

Amendment Engineering Statement

This statement responds to Docket No. 92-111, Hearing Designation Order, paragraph 20, directing Healdsburg Broadcasting, Inc. (HBI) to submit a minor curative amendment to correct antenna height and contour overlap deficiencies, and paragraph 21 requiring an environmental assessment addressing the issue of RF exposure to workers on HBI's proposed tower.

The attached engineering corrects pages 17 and 18 from section V-B, and provides corrected replacement exhibits (Exhibit 3, pages 1 and 2 dated 7.14.92; Exhibit 4, page 2 dated 7.14.92; Exhibit 4, pages 3 and 4 dated 5.30.92; Exhibit 6, page 6 dated 5.30.92) for the continued use of a directional antenna, utilizing 509 meters Above Mean Sea Level. The actual antenna location and maximum ERP of 480 watts remain unchanged from the original engineering. Likewise, the antenna type, manufacture and location of HBI's transmitter site remain unchanged. The correction enlarges all pertinent contours; area within the proposed 70 dBu contour increases from 1158 to 2000 square Kilometers, and the enclosed population from 84,399 to 90,301 persons (1980 census). Modification of the original directional antenna was required to limit radiation towards KKHI-FM to protect it for a short-spaced requirement of 8 kilometers in accordance with Sections 73.207 and 73.215 of the Commission's rules. Distances to KKHI-FM's protected and interfering contours are based on the Class B maximum of 50 KW at 150 meters HAAT. Further, HBI does not propose to side mount its antenna on the same structure as KMGG (BPH910030IF). KMGG is located on a wooden pole approximately 31 meters away. Also included is corrected information concerning HBI's radiation pattern confirming that the pattern does not vary more than 2 dB per 10 degrees azimuth change. This is based on corrected information provided by Jampro Antennas, Inc.

Environmental Assessment

The Mt. Jackson communications facility is located on a remote rugged mountain top. No deleterious ecological or environmental effects delineated in Section 1.1307 of the Commission's Rules are evident or will result from the addition of HBI's proposed radiator. A theoretical study was conducted to fully assess the radio frequency power density question.

Empire Communications, owner of the Mt. Jackson communications facility, has supplied a list of all site users located on the same tower HBI proposes to use. Additionally, KMGG-FM, as already noted, is located on a separate structure. Figure 2 summarizes a power density hazard calculation study showing the theoretical worst-case maximum power 100% duty cycle contribution from all contributors except HBI. The maximum ERP from each antenna was assumed to be isotropically radiated to ensure an absolute worst-case upper bound. Most of the existing antennas are vertically polarized non-directional low power systems multiplexing several users through RF power combiners. The aggregate result concludes that fields 54.3% of those allowed under ANSI C95.1-1982 would be present at the base of the proposed tower if all users transmitted simultaneously with maximum isotropic ERP. The addition of HBI's 2-bay radiator would contribute an additional 14.3% to this total, assuming it too were isotropically radiating at its maximum ERP of 0.480 KW. Based on a more realistic estimate employing the manufacturer's calculated vertical radiation characteristic, an additional contribution of less than 1% is expected at the tower base. Figure 3 summarizes the proposed 2-bay radiator's expected far-field power densities using this vertical radiation characteristic [see Exhibit-3 pages 3 and 4 for basis].

Figure 2. Calculated worst-case power density contributions referred to base of the proposed common tower.

Freq. [MHZ.]	Licensee	ERP [Watts]	Antenna	Height [m]	Pol. Factor	Erel [V/V]	OST-65 Equation	S [uW/cm2]	ANSI Sref [uW/cm2]	ANSI [%]	Notes
43.440	Korbel Inc.	90	Vertical	5.5	1.0	1.0000	4		1000		1
155.550	Sweetwater Utility	25	Vertical G.P.	3.1	1.0	1.0000	4	86.9	1000	8.69	1
451.725	Korbel Inc.	140	Vert. combiner	13.4	1.0	1.0000	4	26.1	1506	1.73	1
460.700	Mark West Schools	140	Vert. combiner	13.4	1.0	1.0000	4	26.1	1536	1.70	1
460.825	Carlile & Assoc.	140	Vert. combiner	13.4	1.0	1.0000	4	26.1	1536	1.70	1
463.850	TeeVax	180	Vert. combiner	13.4	1.0	1.0000	4	33.5	1546	2.17	1
463.950	Sonoma County Pump	120	Vert. combiner	13.4	1.0	1.0000	4	22.3	1546	1.44	1
462.900	PacWest Paging	600	Vertical	23.2	1.0	1.0000	4	37.2	1543	2.41	1
462.975	Sonoma Cnty. Life Sup.	140	Vert. combiner	13.4	1.0	1.0000	4	26.1	1543	1.69	1
464.500	Manuel Bros. Const.	50	Vert. combiner	13.4	1.0	1.0000	4	9.3	1548	0.60	1
464.200	Young Am Homes	50	Vert. combiner	13.4	1.0	1.0000	4	9.3	1547	0.60	1
464.025	Victor Residential	50	Vert. combiner	13.4	1.0	1.0000	4	9.3	1547	0.60	1
851.2125	Sonoma Cnty. Life Sup.	110	Vert. combiner	29.3	1.0	1.0000	4	4.3	2837	0.15	1
851.6875	Empire Communications	320	Vert. combiner	29.3	1.0	1.0000	4	12.5	2839	0.44	1
857.6875	" "	320	Vert. combiner	29.3	1.0	1.0000	4	12.5	2859	0.44	1
858.6875	" "	320	Vert. combiner	29.3	1.0	1.0000	4	12.5	2862	0.44	1
859.6875	" "	320	Vert. combiner	29.3	1.0	1.0000	4	12.5	2866	0.44	1
929.4125	Comtech Paging	440	Vertical	29.3	1.0	1.0000	4	17.1	3098	0.55	1
954.300	Empire Communications	75	1.83 m dish	11.6	1.0	1.0000	4	18.6	3181	0.59	1
CH249A	KMGG-FM, BPH910930IF	2040	2-Bay CPOL	14.2	2.0	1.0000	4	117	1000	11.7	1,2

Notes

1: Worst-case isotropic radiator assumed.

2: Radiator located on wooden pole approximately 31 meters away on a bearing of 310 degrees.

ANSI C95.1-1982: S reference = 1000 [uW/cm^2]

OST Bulletin No. 65, Equation 4, used for calculation of S
Ground Reflection Factor = 1.6 (EPA)
Polarization factor = 2 [V/V] for Cpol with zero ellipticity
ERP = 0.480 [KW]
Height = 14.2 [m]

Antenna Type: Jampro JMPC, 2-bays

Elevation [deg.]	Erel [V/V]	S [uW/cm^2]	ANSI [%]	Radius [m]
0.0	1.000	-	-	Horizon
-5.0	0.952	6.84	0.68	162.0
-10.0	0.835	3.34	0.33	80.5
-15.0	0.649	4.49	0.49	53.0
-20.0	0.434	3.50	0.35	39.0
-25.0	0.211	1.26	0.13	30.5
-30.0	0.000	0.00	0.00	24.6
-35.0	0.178	1.70	0.17	20.3
-40.0	0.307	6.20	0.62	16.9
-45.0	0.395	12.4	1.24	14.2
-50.0	0.442	18.2	1.82	11.9
-51.0	0.444	18.9	1.89	11.5
-52.0	0.445	19.6	1.96	11.1
-53.0	0.444	20.0	2.00	10.7
-54.0	0.442	20.3	2.03	10.3
-55.0	0.439	20.6	2.06	9.9
-56.0	0.435	20.7	2.07	9.6
-57.0	0.430	20.7	2.07	9.2
-60.0	0.408	19.9	1.99	8.2
-65.0	0.365	17.4	1.74	6.6
-70.0	0.311	13.6	1.36	5.2
-75.0	0.246	8.98	0.89	3.8
-80.0	0.178	4.84	0.48	2.5
-85.0	0.139	3.05	0.31	1.2
-90.0	0.100	1.59	0.16	0.0

Figure 3.
Predicted far-field power densities for proposed antenna

I conclude from this prima facie study that hazardous fields do not exist anywhere on the ground prior to, or after, the addition of HBI's proposed 2-bay radiator. Occupational safety will be insured by coordinating with the site user so any authorized tower work will be done with HBI's transmitter turned off. As a warning to the general public, radiation hazard signs will be clearly posted at the base of the proposed tower.

By Stephen C. Petersen

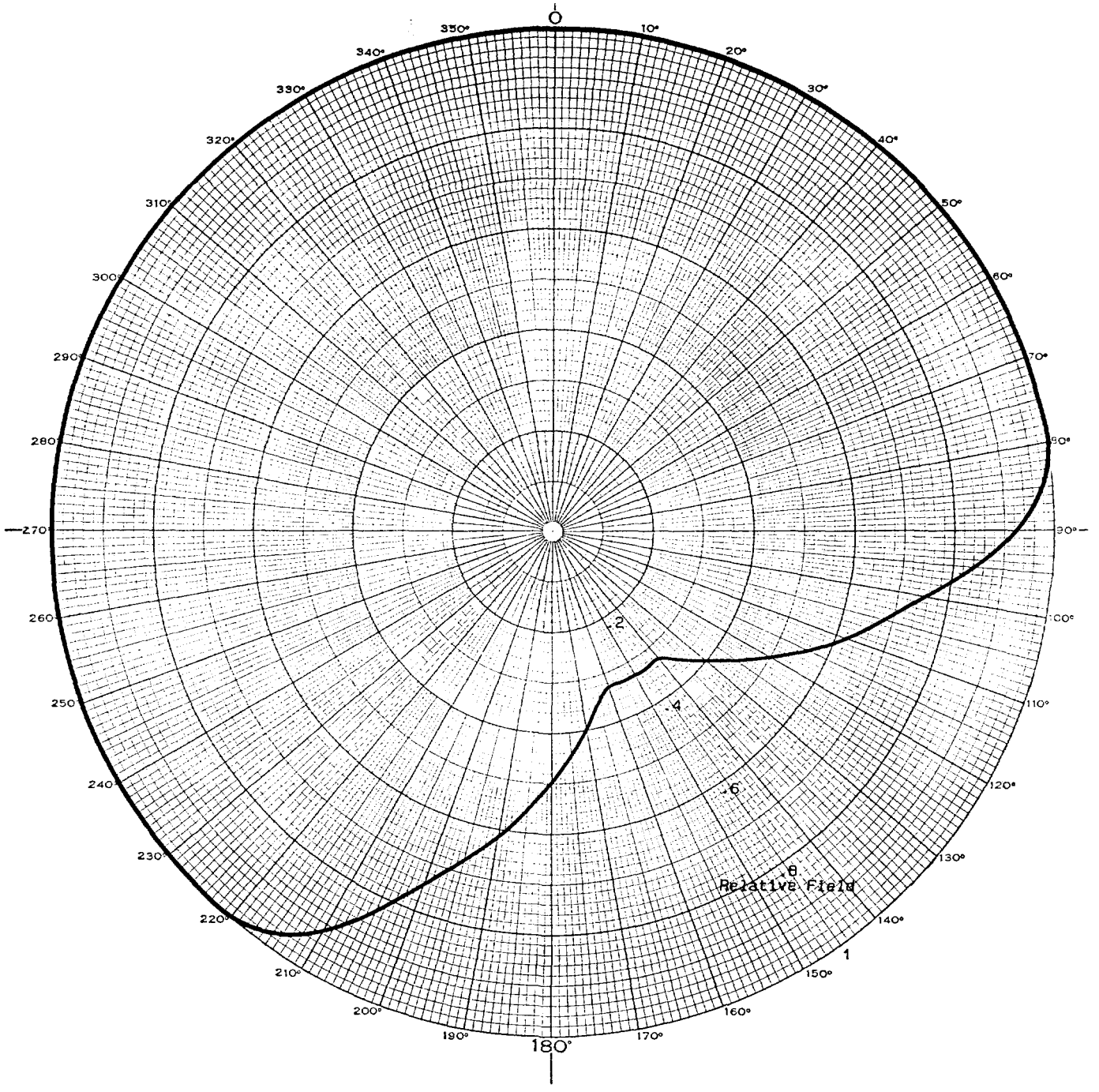
Stephen C. Petersen, P.E.
July 14, 1992

Healdsburg Broadcasting, Inc.
Proposed Channel 240A, Healdsburg, CA
FCC Form 301, Section V-B, question 10, Antenna Data

Proposed Directional Antenna
Horizontal Plane Relative Field Azimuth Pattern

TYPE: Jampro JMPC, 2 Bay DA

POLARIZATION: Circular



Healdsburg Broadcasting, Inc.
Proposed Channel 240A, Healdsburg, CA
FCC Form 340, Section V-B, question 10, Antenna Data

Horizontal Plane Relative Field Tabulation For Proposed Directional Antenna

Antenna Type: Jampro JMCP 2 Bay, DA
Beam Tilt = 0.0 degree
Polarization: Circular; maximum horizontal polarization tabulated

Azim	E-rel	dB-rel	Azim	E-rel	dB-rel
0.0	1.000	0.000	180.0	0.500	-6.021
10.0	1.000	0.000	190.0	0.620	-4.152
20.0	1.000	0.000	200.0	0.750	-2.499
30.0	1.000	0.000	210.0	0.920	-0.724
40.0	1.000	0.000	220.0	1.000	0.000
45.0	1.000	0.000	225.0	1.000	0.000
50.0	1.000	0.000	230.0	1.000	0.000
60.0	1.000	0.000	240.0	1.000	0.000
70.0	1.000	0.000	250.0	1.000	0.000
80.0	1.000	0.000	260.0	1.000	0.000
90.0	0.920	-0.724	270.0	1.000	0.000
100.0	0.750	-2.499	280.0	1.000	0.000
110.0	0.620	-4.152	290.0	1.000	0.000
120.0	0.500	-6.021	300.0	1.000	0.000
130.0	0.400	-7.959	310.0	1.000	0.000
135.0	0.360	-8.874	315.0	1.000	0.000
140.0	0.330	-9.630	320.0	1.000	0.000
150.0	0.330	-9.630	330.0	1.000	0.000
160.0	0.330	-9.630	340.0	1.000	0.000
170.0	0.400	-7.959	350.0	1.000	0.000

Notes:

1. Tabulation is copied from Jampro Corp. supplied data with fields specified every 10.0 and at 45.0, 135.0, 225.0 and 315.0 degrees.

Healdsburg Broadcasting, Inc.
Proposed Channel 240A, Healdsburg, CA
FCC Form 301, Section V-B, question 13, Allocation Study

Calculated Distances to Proposed Service and Interference Contours
N 38-32-24, W 122-57-39

Azim (deg)	E-rel (V/V)	Radial ERP (W)	(dBk)	Radial AE(m)	Haat(m)	CONTOUR DISTANCES (Km) F[5050] 60dBu	70dBu	F[5010] 48dBu
0.0	1.000	480.0	-3.188	238	271	25.1	14.1	51.9
15.0	1.000	480.0	-3.188	162	347	28.3	16.0	58.2
30.0	1.000	480.0	-3.188	135	374	29.4	16.6	60.5
45.0	1.000	480.0	-3.188	112	397	30.2	17.1	62.3
60.0	1.000	480.0	-3.188	123	386	29.8	16.9	61.5
75.0	1.000	480.0	-3.188	91	418	30.9	17.6	63.4
90.0	0.920	406.3	-3.912	71	438	30.4	17.2	62.1
105.0	0.680	222.0	-6.573	67	442	26.3	14.8	55.1
120.0	0.500	120.0	-9.208	82	427	22.3	12.5	47.5
130.0	0.400	76.8	-11.146	71	438	20.2	11.2	43.0
135.0	0.360	62.2	-12.062	65	444	19.3	10.6	41.0
140.0	0.330	52.3	-12.817	70	439	18.4	10.0	39.1
150.0	0.330	52.3	-12.817	78	431	18.2	9.9	38.8
160.0	0.330	52.3	-12.817	111	398	17.5	9.6	37.7
170.0	0.400	76.8	-11.146	157	352	18.2	10.2	38.7
180.0	0.500	120.0	-9.208	166	343	20.1	11.3	42.6
190.0	0.620	184.5	-7.340	188	321	21.7	12.2	45.5
200.0	0.750	270.0	-5.686	161	348	24.7	13.9	51.8
210.0	0.920	406.3	-3.912	137	372	28.1	15.9	58.4
225.0	1.000	480.0	-3.188	121	388	29.9	16.9	61.6
240.0	1.000	480.0	-3.188	201	308	26.6	15.1	54.9
255.0	1.000	480.0	-3.188	243	266	24.8	14.0	51.4
270.0	1.000	480.0	-3.188	164	345	28.2	16.0	58.0
285.0	1.000	480.0	-3.188	233	276	25.3	14.2	52.3
300.0	1.000	480.0	-3.188	287	222	22.8	12.8	47.4
315.0	1.000	480.0	-3.188	426	83	13.8	7.8	29.1
330.0	1.000	480.0	-3.188	324	185	21.0	11.7	43.2
345.0	1.000	480.0	-3.188	258	251	24.2	13.6	50.2

Healdsburg Broadcasting, Inc.
Proposed Channel 240A, Healdsburg, CA
FCC Form 301, Section V-B, question 13, Allocation Study

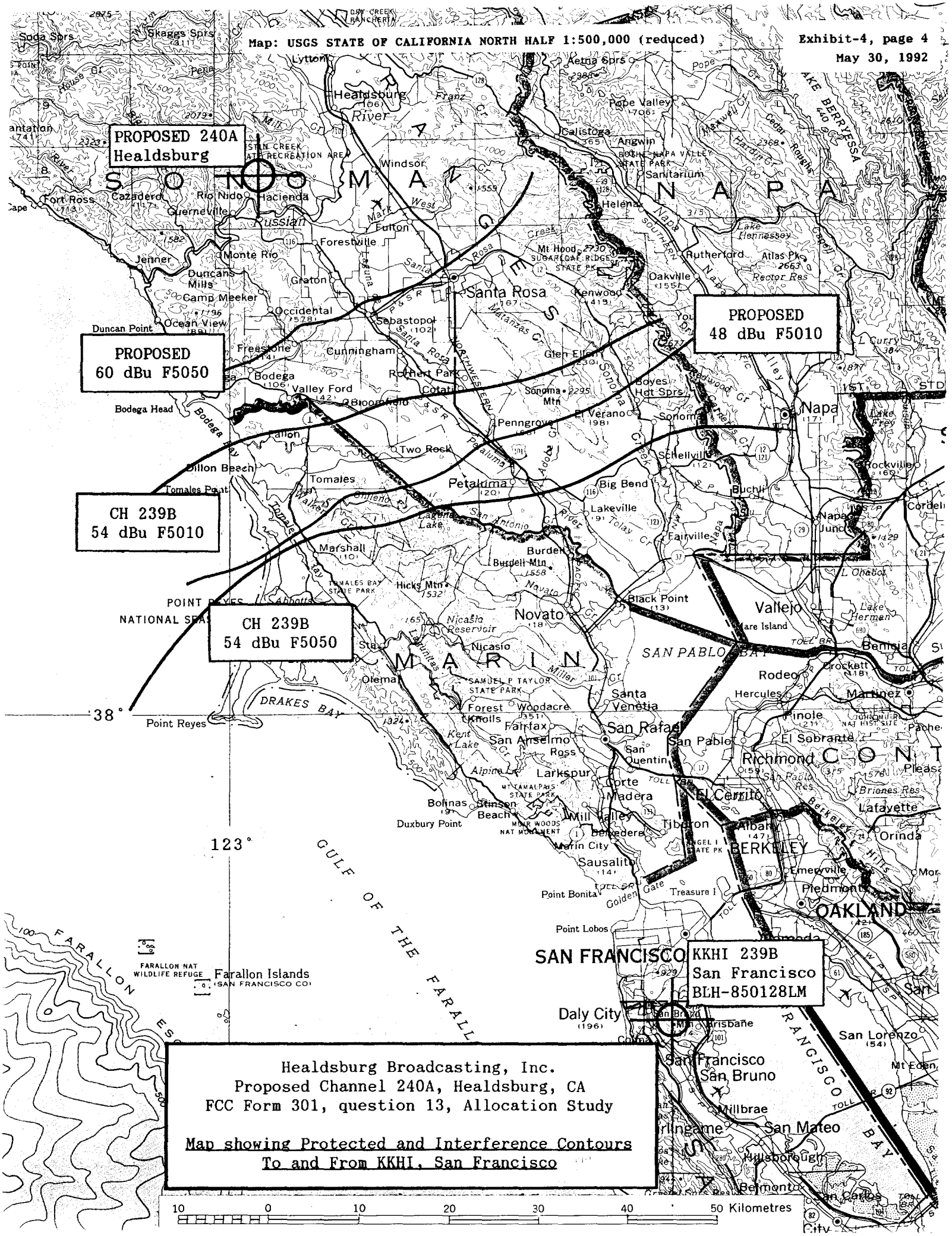
Calculated Distances to First Adjacent Channel Station KKHI Contours
Based on Class-B 50 Kilowatt ERP at 150 meters HAAT
N 37-41-23, W 122-26-12

Azim (deg)	E-rel (V/V)	Radial ERP (KW)	Radial ERP (dBk)	Radial AE(m)$_2$	Radial Haat(m)	CONTOUR DISTANCES (Km)$_1$ 54 dBu F[5050]	54 dBu F[5010]
0.0	1.000	50.0	16.993	55	152	65.3	78.4
5.0	1.000	50.0	16.993	48	159	66.2	79.4
10.0	1.000	50.0	16.993	45	162	66.6	79.8
15.0	1.000	50.0	16.993	40	167	67.2	80.5
20.0	1.000	50.0	16.993	32	175	68.1	81.6
45.0	1.000	50.0	16.993	14	193	69.8	83.9
90.0	1.000	50.0	16.993	1	206	71.1	85.5
135.0	1.000	50.0	16.993	11	196	70.1	84.3
180.0	1.000	50.0	16.993	196	11	36.1	45.3
225.0	1.000	50.0	16.993	32	175	68.1	81.6
270.0	1.000	50.0	16.993	12	195	70.0	84.2
300.0	1.000	50.0	16.993	14	193	69.8	83.9
305.0	1.000	50.0	16.993	15	192	69.7	83.8
310.0	1.000	50.0	16.993	18	189	69.4	83.4
315.0	1.000	50.0	16.993	23	184	69.0	82.8
320.0	1.000	50.0	16.993	31	176	68.2	81.7
325.0	1.000	50.0	16.993	45	162	66.6	79.8
330.0	1.000	50.0	16.993	65	142	63.9	76.9
335.0	1.000	50.0	16.993	71	136	63.1	76.0
340.0	1.000	50.0	16.993	81	126	61.5	74.3
345.0	1.000	50.0	16.993	87	120	60.6	73.3
350.0	1.000	50.0	16.993	85	122	60.9	73.7
355.0	1.000	50.0	16.993	72	135	62.9	75.8

Notes:

1. KKHI-FM's licensed RC of 450 m AMSL and 393 m HAAT were used to determine the contour calculation RC of 207 m AMSL = 57 m AMSL + 150 m HAAT. However, using NOAA 30 sec. terrain data, an 8-radial AE of 43 m AMSL results. For purposes of this study, the more conservative licensed AE was utilized.

2. Radial average elevations are based on NOAA 30 sec. terrain data.



Healdsburg Broadcasting, Inc.
Proposed Channel 240A, Healdsburg, CA
FCC Form 301, question 13, Allocation Study

Map showing Protected and Interference Contours
To and From KKHI, San Francisco


Healdsburg Broadcasting , Inc.
Proposed Channel 240A, Healdsburg, CA
FCC Form 301, question 16
Proposed Coverage Contours
N 38-32-24, W 122-57-39
Map: USGS Western United States 1:250,000 (reduced) Santa Rosa
0°
45°
90°
135°
180°
225°
270°
315°
Proposed
60 dBu F5050
Proposed
70 dBu F5050
Area Within Proposed 60 dBu Contour = 2000 Km2
Enclosed Population = 90,301 persons
38°-15'
123°-00'
122°-45'
30 Kilometers
MENDOCINO COUNTY
SONOMA COUNTY
Cloverdale
Geyserville
Healdsburg
Windsor
Guerneville
Forestville
Sebastopol
SANTA ROSA
Bodega Bay
Occidental
Petaluma
Cotati
Jenner

CERTIFICATE OF SERVICE

I, Peter A. Casciato, certify that the following is true and correct:

I am employed in the City and County of San Francisco, California, am over the age of eighteen years, and am not a party to the within entitled action:

My business address is: 1500 Sansome St., Suite 201, San Francisco, California 94111.

On July 16, 1992, I caused the attached Petition for Leave to Amend and Amendment of Healdsburg Broadcasting, Inc. to be served by causing true copies thereof, enclosed in sealed envelopes with postage thereon fully prepaid, to be placed in the United States Post Office mail box at San Francisco, California, addressed to the following listed people:

Hon. Edward J Kuhlmann
Administrative Law Judge
Federal Communications Commission
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Washington, DC 20036
(Federal Express\By Hand)

Larry Miller, Esq.
Mass Media Bureau
Federal Communications Commission
2025 M Street NW Room 7212
Washington, D.C. 20554
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